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EXAMINER

DINH, KHANH Q

ART UNIT PAPER NUMBER

2151

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/591,746

Applicant(s)

YU ET AL.

Examiner

Khanh Dinh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-29 is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the Amendment filed on 8/3/2004. Claims 1-29 are presented for examination.

Claim Objections

2. Claims 1 and 10 are objected to because of the following informalities:

Examiner is unclear where the limitation "the group consisting of" referring?
There is insufficient antecedent basis for this limitation in the claim. For examination purpose, Examiner assumes the limitation "*the group consisting of*" to be "a group consisting of"

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-6, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Boyle et al., US pat. No.6,119,167.

As to claim 1, Boyle discloses a method for optimizing performance of at least one pull service (156 fig.1) and at least one push service (138 fig.1) to a plurality of mobile users (120.1 and 120.2 fig.1) comprising the steps of:

reducing access latency for said at least one pull service running on at least one Web server (WWW server 130.1 or 130.2 of fig.1) by prefetching documents (HTML documents, see col.5 lines 3-57) into a cache of at least one proxy gateway (150 fig.1, col.6 lines 25-61) to said plurality of mobile users (138 or 156 fig.1) by using *at least one* factor selected from the group consisting of a frequency of access to said pull content of said pull service, *an update cycle of said pull content*, response delay for prefetching said pull contents (using a stock quote service to push the price of a selected stock when the price changes and providing the latest version of data in browser proxy, col.7 line 23 to col.8 line 34), said at least one proxy gateway (150 fig.1) connected between said mobile user (138 fig.1) and said Web server (130 fig.1).

iteratively estimating a state of each of said plurality of mobile users (allowing users to specify preferences for data-push) for determining push content to be forwarded to said mobile user by said at least one push service running on said at least one Web server (see fig.2, col.9 line 7 to col.10 line 65 and col.11 lines 9-58).

As to claim 2, Boyle discloses pull content is plurality of documents (URL contents) and said step of reducing access latency comprises the step of selecting a predetermined number of documents to be prefetched into said cache of said proxy gateway, wherein said predetermined number of documents have the greatest reduction in said access latency (balancing the latency and the cost of data access, see col.11 line 9 to col.12 line 50 and col.13 lines 24-60).

As to claim 3, Boyle discloses using factor of said frequency of access wherein frequently accessed documents are prioritized for being stored in a cache of a proxy gateway (using push and pull operations, see fig.2, col.11 lines 9-58 and col.12 line 34 to col.13 line 48).

As to claim 4, Boyle discloses using factor of said update cycle wherein said pull documents having a shorter update cycle are prioritized for being stored into a cache of a proxy gateway said proxy gateway (see fig.2, col.11 lines 9-63 and col.12 line 34 to col.13 line 48).

As to claim 5, Boyle discloses using factor of said response delay (delay between delivery cycles) wherein said pull documents having a longer response delay are prioritized for being stored in a cache of a proxy gateway (see fig.8, col.11 lines 9-63 and col.25 line 62 to col.26 line 64).

As to claim 6, Boyle discloses selecting a predetermined number of documents to be prefetched into cache of a proxy gateway, and said step of selecting a predetermined number of documents uses said factors, said frequency of access, said update cycle and said response delay (delay between delivery cycles), wherein said frequently accessed pull documents having a shorter update cycle and a longer response delay are prioritized for being prefetched in said cache of said proxy gateway (see fig.8, col.11 lines 9-63 and col.25 line 62 to col.26 line 64).

Claims 10 and 11 are rejected for the same reasons set forth in claims 1 and 2 respectively.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

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commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7-9 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle et al., US pat. No.6,119,167 in view of Fernandez et al., US pat.

No.6,697,103.

As to claims 7-9 and 12-14, Boyle's teachings still applied as in item 3 above. Boyle does not specifically disclose tracking data of a plurality of mobile users and geo-location measurement and behavior observation data, caching mobility and behavior-related content and at least one of the following factors: location of said one of said plurality of mobile users, direction of said one of said plurality of mobile users, speed of said one of said plurality of mobile users, and behavior of said one of plurality of mobile users. However, Fernandez discloses tracking data of a plurality of mobile users and geo-location measurement (monitoring and predicting data processing in a mobile network of one or more remote or local objects) and behavior observation data, caching mobility and behavior-related content and at least one of the following factors: location of said one of said plurality of mobile users, direction of said one of said plurality of mobile users, speed of said one of said plurality of mobile users, and behavior of said one of plurality of mobile users (using GPS calculation to determine the location of the target units/movable objects such as cellular phones and providing data information accordingly, see abstract, figs.1, 2, col.2 lines 11-48, col.3 line 17 to col.4 line 42 and col.5 line 1 to col.6 line 49). It would have been obvious to one of the

ordinary skill in the art at the time the invention was made to implement Fernandez's teachings into the computer system of Boyle to monitor remote objects because it would have tracked object data status information, correlated movement activity from different sources and maintained system security access in a communications network (see Fernandez's col.5 line 46 to col.6 line 15).

Allowable Subject Matter

7. Claims 15-29 allowed.

Response to Arguments

8. Applicant's arguments filed on 8/3/2004 have been fully considered but they are not persuasive.

* Applicant asserts that the Boyle reference does not disclose using *at least* one factor selected from the group consisting of a frequency of access to said pull content of said pull service, an update cycle of said pull content and response delay for prefetching said pull contents.

Examiner respectfully disagrees. In the claims, Applicant recites the limitation "selected from" meaning "one of factors", not all three factors. Boyle discloses push and pull techniques that reduce the use of network resources and make it faster for the client to access data from the server and therefore reduces latency or use of connections in communications network. For example, Boyle discloses the Applicant's claimed invention " an update cycle of said pull content" by using a stock quote service

to push the price of a selected stock when the price changes and providing the latest version (updating of pull data to users) of data in browser proxy (see fig.1, col.2 line 66 to col.3 line 40 and col.7 line 23 to col.8 line 34). This is equivalent to what is claimed.

- * Applicant asserts that the Boyle reference does not disclose “iteratively estimating a state of each of said plurality of mobile users” such as mobile tracking, geo-location measurement and behavior observation as in the specification.

Examiner is noted that only claimed subject matter, not the specification is the measure of the invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. See In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11, 15 (CCPA 1978). The Examiner has a duty and responsibility to the public and to Applicant to interpret the claims as broadly as reasonably possible during prosecution (see In re Prater, 56 CCPA 1381, 415 F.2d 1393, 162 USPQ 541 (1969)). In the instant application, Examiner points out that that Boyle discloses the applicant's claimed invention by allowing users to specify preferences for data-push including a particular time zone and notification services. As a result, outdate data will be deleted (see fig.2, col.9 line 7 to col.10 line 65 and col.11 lines 9-58).

- * Applicant asserts that the Boyle reference does not disclose “optimizing the performance of”.

In response to applicant's arguments, the recitation "optimizing the performance of" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Therefore, the examiner asserts that cited prior art teaches or suggests the subject matter broadly recited in independent claims 1 and 10. Claims 2-9 and 11-14 are also rejected at least by virtue of their dependency on independent claims and by other reasons set forth in the previous office action. Accordingly, claims 1-14 are respectfully rejected.

Conclusion

9. Claims 1-14 are *rejected*.
10. Claims 15-29 are allowed.
11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not


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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung, can be reached on (571) 272-3939. The fax phone number for this group is: (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305 -9600.


ZARNI MAUNG
PRIMARY EXAMINER

Khanh Dinh
Patent Examiner
Art Unit 2151
12/6/2004